

FIG. 1

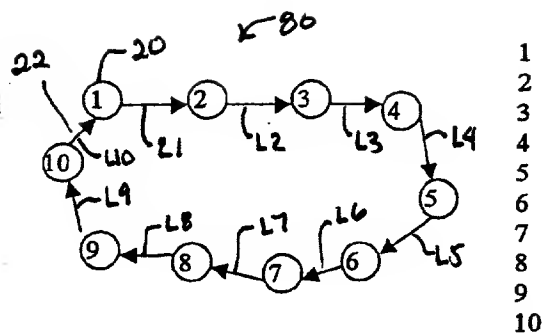


FIG. 2

1
2
3
4
5
6
7
8
9
10

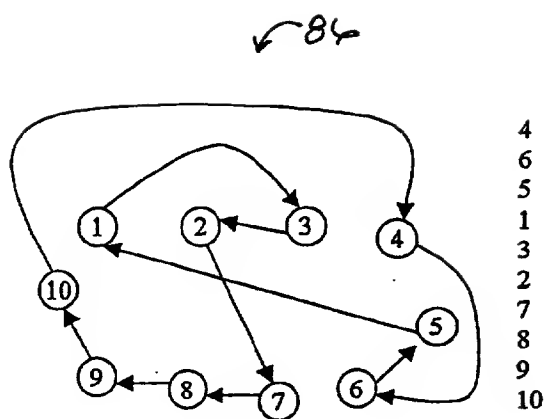


FIG. 5

4
6
5
1
3
2
7
8
9
10

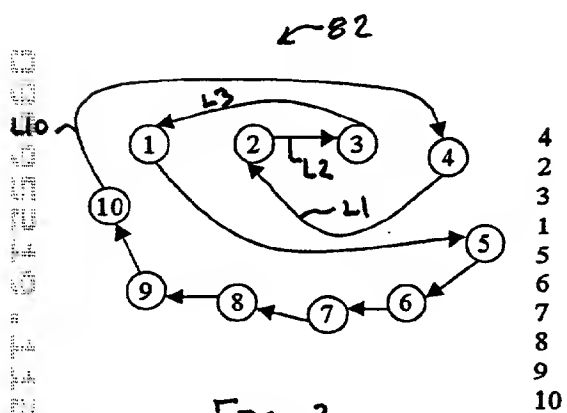


FIG. 3

4
2
3
1
5
6
7
8
9
10

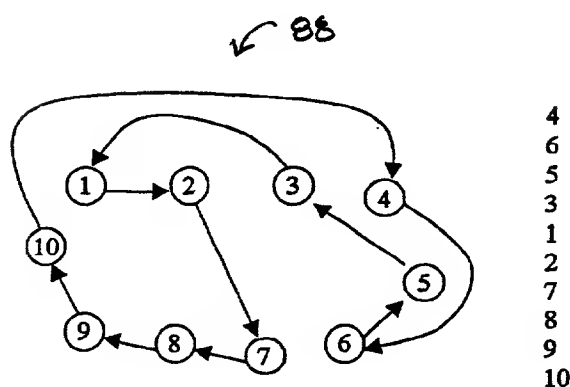


FIG. 6

4
6
5
3
1
2
7
8
9
10

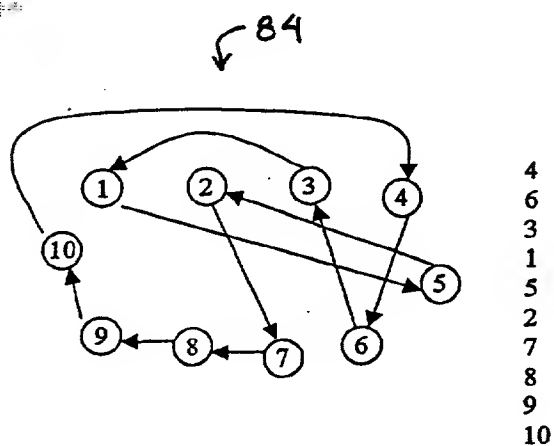


FIG. 4

4
6
3
1
5
2
2
7
8
9
10

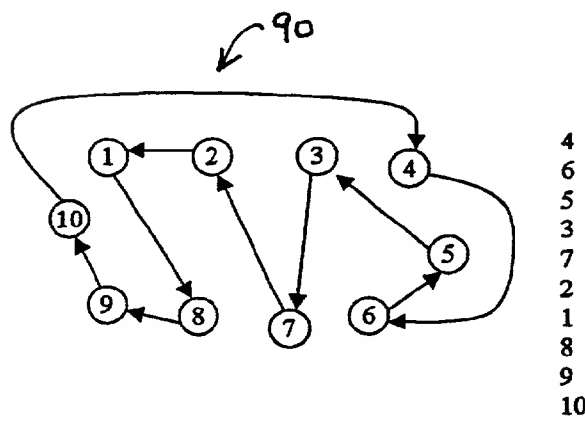


FIG. 7

4
6
5
3
7
2
1
8
9
10

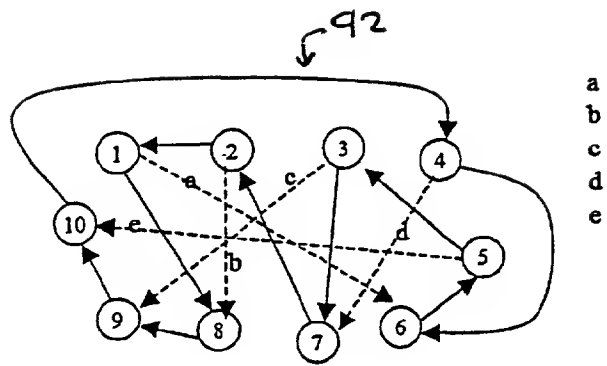


FIG. 8

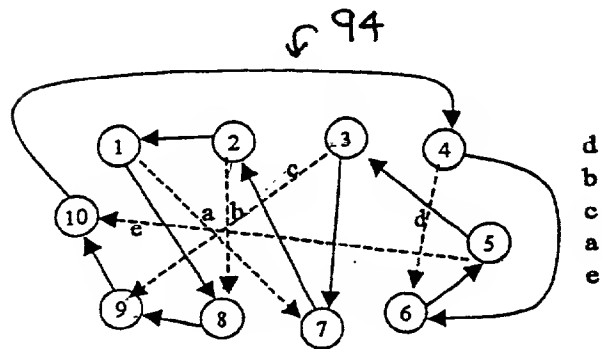


FIG. 9

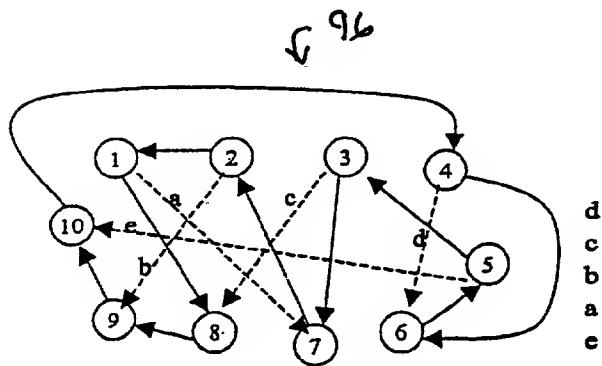


FIG. 10

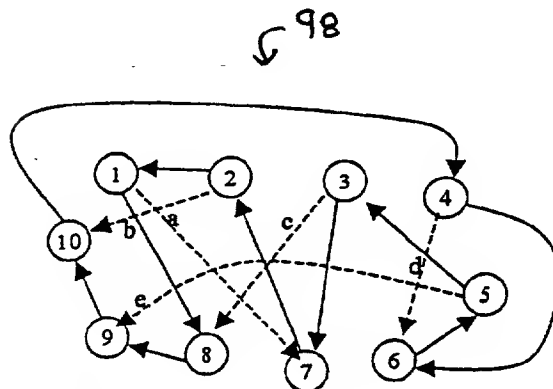


FIG. 11

	1	2	3	4	5	6	7	8	9	10
1	0	1								1
2	1	0	1							
3		1	0	1						
4			1	0	1					
5				1	0	1				
6					1	0	1			
7						1	0	1		
8							1	0	1	
9								1	0	1
10	1								1	0

Figure Connectivity of Figure 2

12

	1	2	3	4	5	6	7	8	9	10
1	0		1		1					
2		0	1	1						
3	1	1	0							
4		1		0						1
5	1				0	1				
6					1	0	1			
7						1	0	1		
8							1	0	1	
9								1	0	1
10				1					1	0

Figure 4. Connectivity of Figure 3

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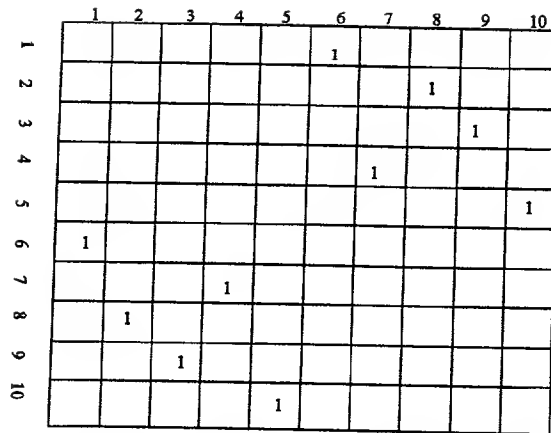


Figure 8. Crosslink connectivity of Figure 2-a

8

14

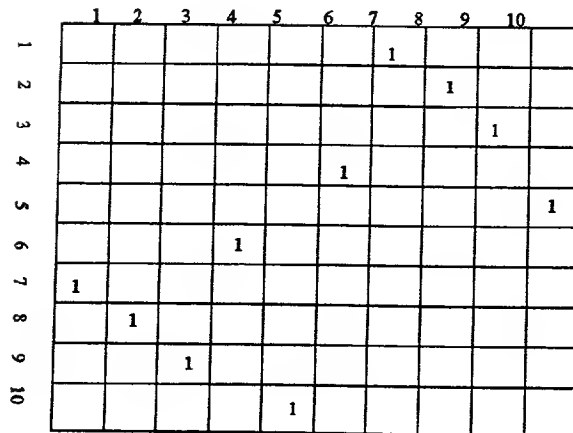


Figure 9. Crosslink connectivity of Figure 2-b

9

14

15

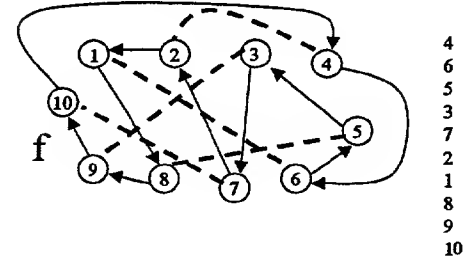
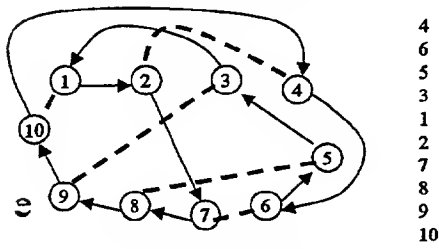
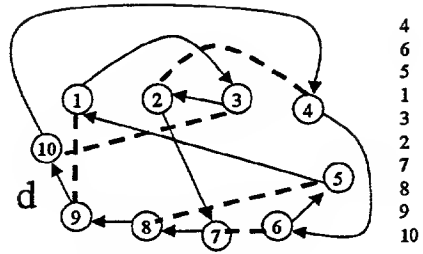
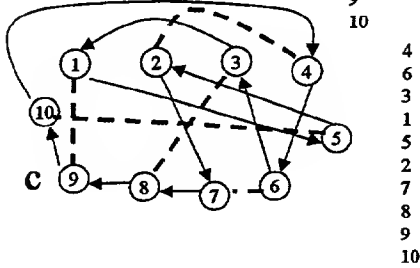
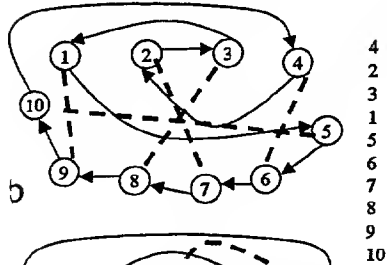
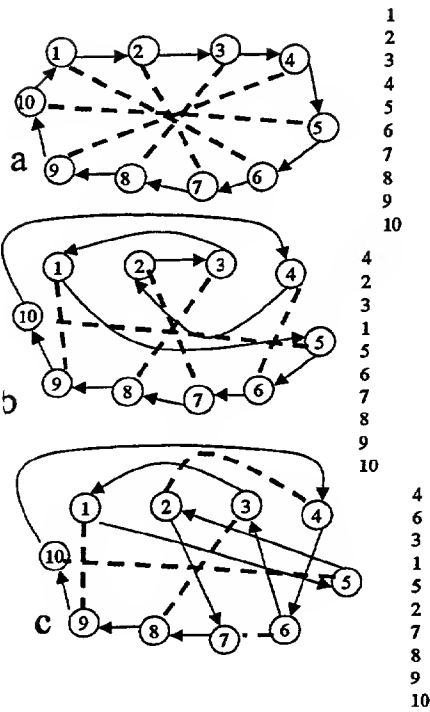


Figure 7: Optimization example using loop and crosslink optimization simultaneously

FIGS. 16a-16f

	1	2	3	4	5	6	7	8	9	10
1	0	1				2				1
2	1	0	1				2			
3		1	0	1				2		
4			1	0	1				2	
5				1	0	1				2
6	2				1	0	1			
7		2				1	0	1		
8			2				1	0	1	
9				2				1	0	1
10	1				2				1	0

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Figure : Link matrix with loop links and crosslinks

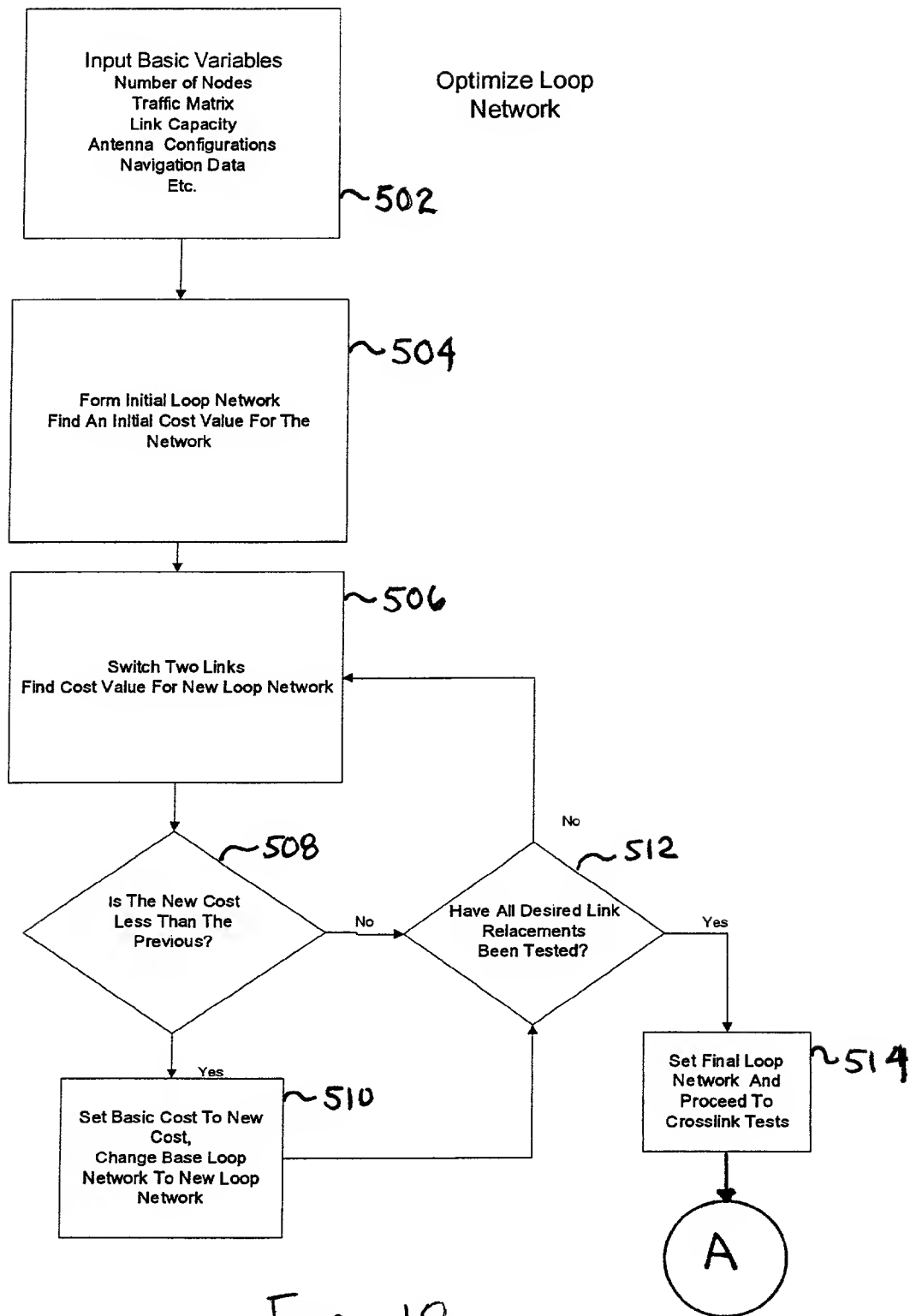


FIG. 18

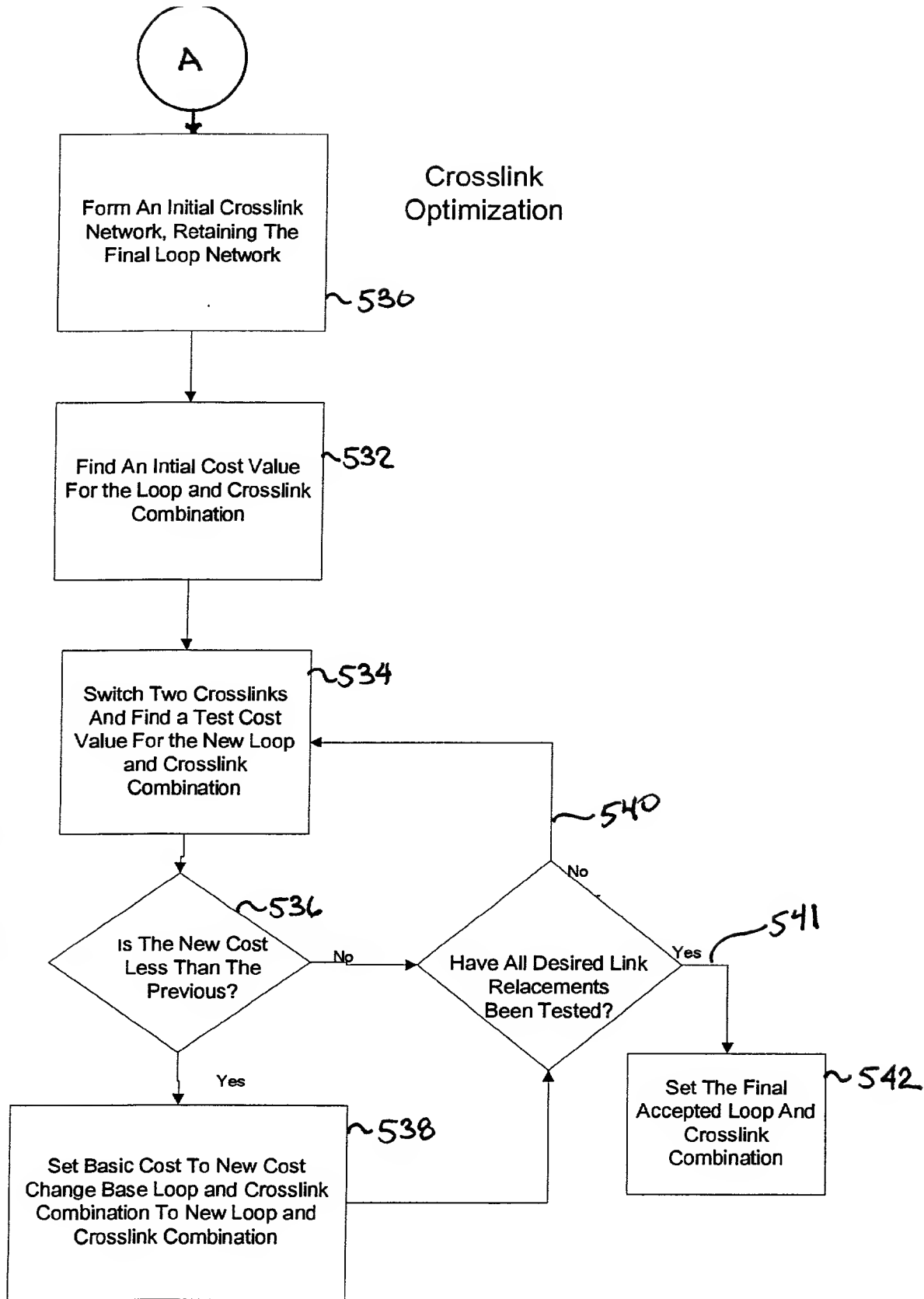


FIG. 19

Cost Value Computation

Find All Least Hop Paths From Each
Node To All Other Nodes In The
Network

~560

Compute A Cost Value For Each Path

~562

The Cost Can Contain A Combination
Of Factors Such As Link Utilization,
Link Stability, Bit Error Rate,
Expected Connectivity Duration,
Power Minimization, Etc.

Compute Sum Of All Path Costs To
Determine Overall Cost Value For The
Network

~564

FIG. 20

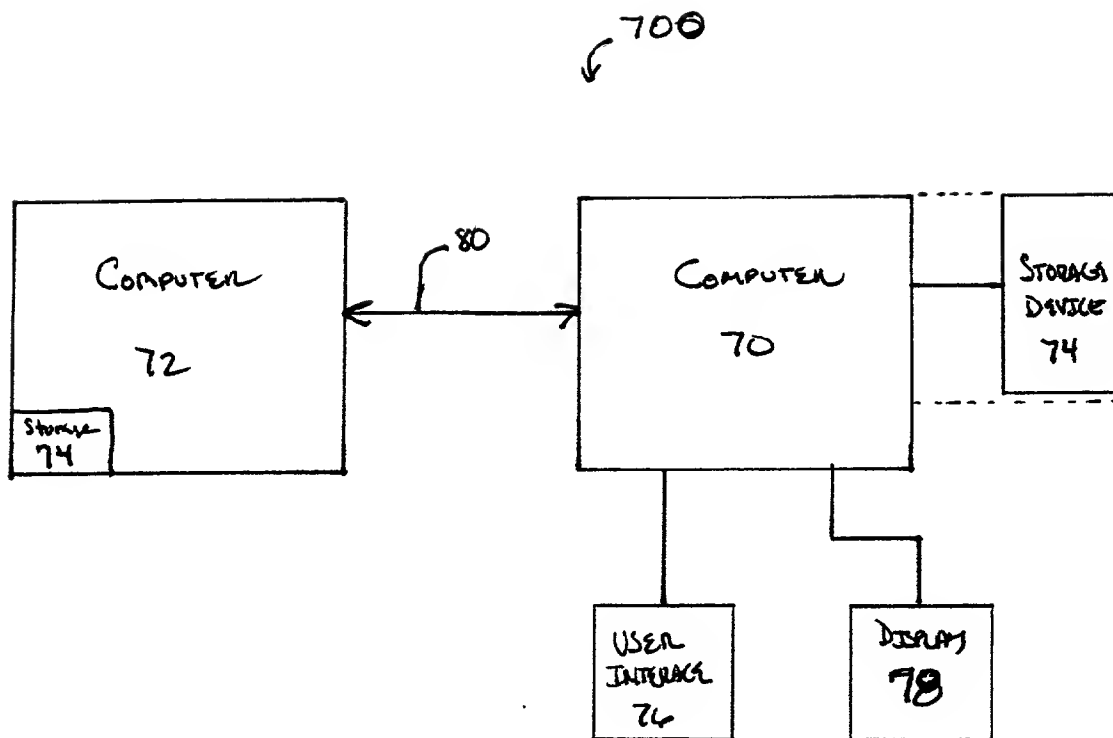


FIG. 21